Complete Summary

TITLE

Heart failure in adults: percentage of adult patients with a primary diagnosis of heart failure who are readmitted for heart failure within 30 days of discharge.

SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2007 Aug. 119 p. [217 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Use of Services

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of adult patients with a primary diagnosis of heart failure who are readmitted for heart failure within 30 days of discharge.

RATIONALE

The priority aim addressed by this measure is to decrease the re-admission rate within 30 days of discharge following hospitalization for heart failure.

PRIMARY CLINICAL COMPONENT

Heart failure; hospital discharge; hospital readmission rate

DENOMINATOR DESCRIPTION

Number of adult patients with a primary diagnosis of heart failure who were discharged alive 30 days from the measurement period (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Number of adult patients with a primary diagnosis of heart failure who were readmitted for heart failure within 30 days of discharge (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

<div style="background:#8080f0; text-align:center; font-weight:bold; color:white">Evidence Supporting the Measure</div>

EVIDENCE SUPPORTING THE VALUE OF MONITORING USE OF SERVICE

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- Heart failure in adults.

<div style="background:#8080f0; text-align:center; font-weight:bold; color:white">Evidence Supporting Need for the Measure</div>

NEED FOR THE MEASURE

Unspecified

<div style="background:#8080f0; text-align:center; font-weight:bold; color:white">State of Use of the Measure</div>

STATE OF USE

Current routine use

CURRENT USE

Monitoring and planning

<div style="background:#8080f0; text-align:center; font-weight:bold; color:white">Application of Measure in its Current Use</div>

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Heart failure is a major health problem in the United States, and the incidence of the disease is projected to increase. It was the most frequent diagnosis of Medicare patients discharged from the hospital in 2001. There are an estimated 5 million individuals currently diagnosed with heart failure, 550,000 new cases diagnosed annually, and 1 million people hospitalized annually (including readmission rates of 30 to 60%).

EVIDENCE FOR INCIDENCE/PREVALENCE

Institute for Clinical Systems Improvement (ICSI). Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2007 Aug. 119 p. [217 references]

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

There are over 260,000 annual deaths from heart failure. From 1979 to 2000 heart failure death rates have increased 148% and hospital discharges have increased 165%. The prognosis of patients with a new diagnosis of heart failure is poor. Senni et al. (1998) noted survival to be 86% at 3 months, 76% at one year, and only 35% at 5 years.

EVIDENCE FOR BURDEN OF ILLNESS

Institute for Clinical Systems Improvement (ICSI). Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2007 Aug. 119 p. [217 references]

Senni M, Tribouilloy CM, Rodeheffer RJ, Jacobsen SJ, Evans JM, Bailey KR, Redfield MM. Congestive heart failure in the community: a study of all incident cases in Olmsted County, Minnesota, in 1991. Circulation1998 Nov 24;98(21):2282-9. PubMed

UTILIZATION

See the "Incidence/Prevalence" field.

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Not within an IOM Care Need

IOM DOMAIN

Not within an IOM Domain

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Adult patients with a primary diagnosis of heart failure who were discharged alive.

There are two possible periods of evaluations: measuring admission that occurs 30 days prior to a discharge and measuring re-admission that occurs 30 days following discharge. For the first option, a hospital would start with the discharges for March and then look at the previous 30 days to see whether any of these discharges were readmissions from a previous hospital stay for heart failure. For the second option, a hospital would start with the discharges for February and track for the next 30 days whether any of these patients are readmitted to the hospital.

Monthly data will be submitted quarterly.

The suggested sample size is 20 patients per month.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Number of adult patients with a primary diagnosis of heart failure* who were discharged alive 30 days from the measurement period

*International Classification of Diseases, Ninth Revision (ICD-9) codes: 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9. (Refer to the table, "Descriptions of ICD-9 Codes," in the original measure documentation for code descriptions.)

Exclusions

- Patients who are less than 18 years of age
- Patients who died prior to discharge
- Patients who were transferred to another hospital
- Patients who left against medical advice
- Patients discharged to hospice

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are not equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Number of adult patients with a primary diagnosis of heart failure who were readmitted* for heart failure within 30 days of discharge

*Readmission rate = Number of patients readmitted within 30 days of discharge

divided by

Number of patients discharged 30 days from measurement period

Exclusions
Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Does not apply to this measure

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Undetermined

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Percentage of adult patients with a primary diagnosis of heart failure who are readmitted for heart failure within 30 days of discharge.

MEASURE COLLECTION

[Heart Failure in Adults Measures](#)

DEVELOPER

Institute for Clinical Systems Improvement

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2006 Aug

REVISION DATE

2007 Aug

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2006 Aug. 116 p.

SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Heart failure in adults. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2007 Aug. 119 p. [217 references]

MEASURE AVAILABILITY

The individual measure, "Percentage of adult patients with a primary diagnosis of heart failure who are readmitted for heart failure within 30 days of discharge," is published in "Health Care Guideline: Heart Failure in Adults." This document is available from the [Institute for Clinical Systems Improvement (ICSI) Web site](#).

For more information, contact ICSI at, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; phone: 952-814-7060; fax: 952-858-9675; Web site: [www.icsi.org](#); e-mail: [icsi.info@icsi.org](#)

NQMC STATUS

This NQMC summary was completed by ECRI on November 14, 2006. This NQMC summary was updated by ECRI Institute on December 16, 2007.

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